

**Listing of Claims:**

1. (Canceled)

2. (Currently Amended) A The method according to of claim 1, ~~characterized in that~~ wherein the uplink tandem free operation data frames are relayed ~~(511)~~ as such.

3. (Currently Amended) A The method according to of claim 2, ~~characterized in that~~ wherein each uplink tandem free operation data frame is relayed ~~(512)~~ in a packet of a certain packet protocol and that only one uplink data frame related to a certain connection is carried in each packet.

4. (Currently Amended) A The method according to of claim 2, ~~characterized in that~~ wherein the uplink tandem free operation data frames are divided ~~(611)~~ into parts and each part is transmitted in a packet of a certain packet protocol and that only one part related to a certain connection is carried ~~(612)~~ in each packet.

5. (Currently Amended) A The method according to of claim 2, ~~characterized in that~~ wherein the uplink tandem free operation data frames or parts of the uplink tandem free operation data frames related to more than one connection are carried ~~(612)~~ in each packet.

6. (Currently Amended) A method for transmitting data over packet network, where a cellular network is connected to a packet network and uplink tandem free operation data frames, which carry coded data and in a frame structure inband tandem free operation signalling information related to the coding, are transmitted from the cellular network towards the packet network, wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, ~~according to claim 1, characterized in that~~ and the coded data from the uplink tandem free operation data frames is extracted ~~(711)~~ and transmitted over a first packet data connection and the tandem free operation signalling information from the uplink tandem free operation data frames is extracted ~~(711)~~ and transmitted over a second packet data connection.

7. (Currently Amended) A The method ~~according to~~ of claim 6, ~~characterized in that~~ wherein said tandem free operation signalling information is extracted and transmitted over a certain packet data connection that confirms the delivery of packets.

8. (Currently Amended) A The method ~~according to~~ of claim 7, ~~characterized in that~~ wherein said tandem free operation signalling information is transmitted using Transfer Transport Control Protocol.

9. (Currently Amended) A The method ~~according to~~ of claim 7, ~~characterized in that~~ wherein said tandem free operation signalling information is transmitted using Real-time Transport (RTP) Control Protocol.

10. (Currently Amended) A The method ~~according to~~ of claim 1 6, ~~characterized in that~~ the wherein non-redundant data from the uplink tandem free operation data frames is transmitted using a certain protocol that supports real time applications.

11. (Currently Amended) A The method ~~according to~~ of claim 10, ~~characterized in that~~ wherein the non-redundant data is transmitted using Real-time ~~Transfer~~ Transport (RTP) Control Protocol.

12. (Currently Amended) A The method ~~according to~~ of claim 1 6, ~~characterized in that~~ wherein the information transmitted over the packet network is processed on the an edge of the packet network.

13. (Currently Amended) A The method ~~according to~~ of claim 12, ~~characterized in that~~ wherein the coded data, which is part of the non-redundant information transmitted over the packet network, is decoded on the edge of the packet network.

14. (Currently Amended) A The method ~~according to~~ of claim 12, ~~characterized in that~~ wherein downlink tandem free operation frames, which carry said coded data and, as inband

signalling in the frame structure, said tandem free operation signalling information, are constructed on the edge of the packet network from the non-redundant information transmitted over the packet network.

15. (Currently Amended) A The method according to of claim 12, ~~characterized in that~~ wherein

[[ - ]] a second cellular network is connected to the packet network,

[[ - ]] second uplink tandem free operation data frames which carry coded data and inband tandem free operation signalling information related to the coding, are transmitted from the second cellular network towards the packet network[[ ; ]],

[[ - ]] the uplink tandem free operation data frames and the second uplink tandem free operation data frames are related to a certain bidirectional connection,

[[ - ]] at least all non-redundant information, ~~said non-redundant information comprising~~ which comprises said inband tandem free operation signalling information, from the second tandem free operation uplink data frames is extracted from said second uplink tandem free operation data frames and transmitted over the packet network, and wherein

[[ - ]] all non-redundant information related to said connection and transmitted over the packet network is processed on ~~the~~ edges of the packet network.

16. to 19 (Canceled)

20. (New) A method for transmitting data over packet network, where a cellular network is connected to a packet network and uplink tandem free operation data frames, which carry coded data and in a frame structure inband tandem free operation signalling information related to the coding, are transmitted from the cellular network towards the packet network, wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, and the non-redundant

information from the uplink tandem free operation data frames is transmitted using a Real-time Transport (RTP) Control Protocol that supports real time applications.

21. (New) A method for transmitting data over packet network, where a cellular network is connected to a packet network and uplink tandem free operation data frames, which carry coded data and in a frame structure inband tandem free operation signalling information related to the coding, are transmitted from the cellular network towards the packet network, wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, the information transmitted over the packet network is processed on an edge of the packet network and the coded data, which is part of the non-redundant information transmitted over the packet network, is decoded on the edge of the packet network.

22. (New) A method for transmitting data over packet network, where a cellular network is connected to a packet network and uplink tandem free operation data frames, which carry coded data and in a frame structure inband tandem free operation signalling information related to the coding, are transmitted from the cellular network towards the packet network, wherein at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the uplink tandem free operation data frames is extracted from said frames to the packet network and transmitted over the packet network, the information transmitted over the packet network is processed on an edge of the packet network and downlink tandem free operation frames, which carry said coded data and, as inband signalling in the frame structure, said tandem free operation signalling information, are constructed on the edge of the packet network from the non-redundant information transmitted over the packet network.

23. (New) A gateway comprising:

input block for receiving uplink tandem free operation data frames transmitted from a cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

extraction block for extracting at least all non-redundant information, which comprises said in-band tandem free operation signalling information, from the received uplink tandem free operation data frames; and

output block for transmitting the coded data extracted from the uplink tandem free operation data frames over a first packet data connection and said tandem free operation signalling information extracted from the uplink tandem free operation data frames over a second packet data connection.

24. (New) A gateway comprising:

input block for receiving uplink tandem free operation data frames transmitted from a cellular network towards a packet network, said frames carrying coded data and, in a frame structure, in-band tandem free operation signalling information related to the coding;

extraction block for extracting at least all non-redundant information, which comprising said in-band tandem free operation signalling information, from the received uplink tandem free operation data frames; and

output block for transmitting the non-redundant information extracted from the uplink tandem free operation data frames by utilizing a Real-time Transport Protocol.

25. (New) A gateway comprising:

input block for receiving, in packet format, non-redundant information extracted from uplink tandem free operation frames transmitted from the cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

recognition block for extracting coded data from said non-redundant information; and

decoding block for constructing decoded data from said coded data on an edge of the packet network.

extraction block for extracting at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the received uplink tandem free operation data frames; and

output block for transmitting the coded data extracted from the uplink tandem free operation data frames over a first packet data connection and said tandem free operation signalling information extracted from the uplink tandem free operation data frames over a second packet data connection.

24. (New) A gateway comprising:

input block for receiving uplink tandem free operation data frames transmitted from a cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

extraction block for extracting at least all non-redundant information, which comprises said inband tandem free operation signalling information, from the received uplink tandem free operation data frames; and

output block for transmitting the non-redundant information extracted from the uplink tandem free operation data frames by utilizing a Real-time Transport Protocol.

25. (New) A gateway comprising:

input block for receiving, in packet format, non-redundant information extracted from uplink tandem free operation frames transmitted from the cellular network towards a packet network, said frames carrying coded data and, in a frame structure, inband tandem free operation signalling information related to the coding;

recognition block for extracting coded data from said non-redundant information; and

decoding block for constructing decoded data from said coded data on an edge of the packet network.

26. (New) A gateway comprising:

input block for receiving, in packet format, non-redundant information extracted from uplink tandem free operation frames transmitted from the cellular network towards a packet network, said frames carrying coded data and, in a frame structure, in-band tandem free operation signalling information related to the coding;

recognition block for interpreting the received information; and

frame construction block for constructing, on an edge of the packet network from the non-redundant information, downlink tandem free operation frames, which carry the coded data and, as inband signalling in the frame structure, the tandem free operation signalling information.